

## Patent Abstracts of Japan

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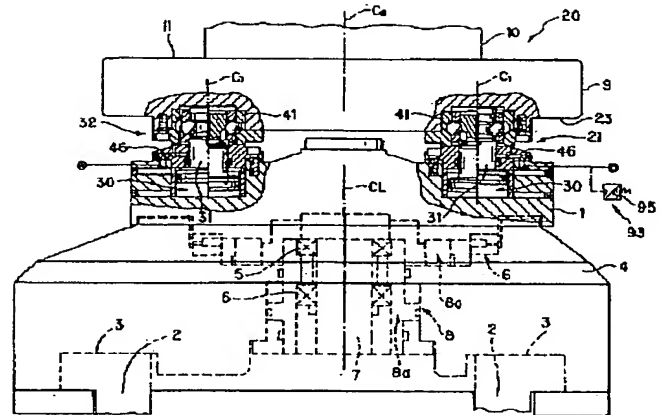
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TITLE : CLAMP AND UNCLAMP DEVICE FOR PALLET FOR MACHINE TOOL



ABSTRACT : PROBLEM TO BE SOLVED: To reliably separate a pallet mounted on a table through the taper surface of at least a clamp and unclamp device during unclamping operation.

SOLUTION: To removably clamp a pallet against a table, at least three sets of clamp and unclamp mechanisms 21 and 32 are arranged. In a so formed clamp and unclamp device 20, at least two sets of the clamp and unclamp mechanisms of three sets of the clamp and unclamp mechanisms 21 and 32 are a two-surface constraining clamp and unclamp mechanism 21 to clamp a pallet 9 on a table 1 through two-surface constraint through which a taper shaft part arranged on the table upper surface side and an end face on the table upper surface side are respectively adhered to a taper hole part formed in the under surface side of a pallet 9 and an end face on the pallet lower surface side. The clamp and unclamp mechanisms 21 and 32 at least in three sets clamp the pallet 9 against the table 1 during clamping operation, the pallet 9 is brought into an unclamping state during unclamping operation, and the pallet under surface is forcibly pushed up to separate the end face on the pallet under surface side from the end face on the table upper surface side.

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